

PLANNING AND ACCOMPLISHMENT NARRATIVE

BENTON LAKE NATIONAL WILDLIFE REFUGE

P. O. Box 450

Black Eagle, Montana 59414

Personnel

Name

Title

George A. Devan

Refuge Manager - Transferred May 7, 1973

Gary A. Hagedorn

Assistant Refuge Manager - Acting Manager
May 8, 1973 - June 30, 1973

Elizabeth A. Benway

Administrative Clerk

Dean D. Rodman

Engineering Equipment Operator

Vincent J. Marko

Maintenance man

Approved, Regional Office

Prepared by:

Signature

Assistant Refuge Manager

Approved by:

Title

Refuge Manager

January 28, 1974

Date

Date

PLANNING AND ACCOMPLISHMENT NARRATIVE

Benton Lake National Wildlife Refuge

Report Period - January 1, 1973 - June 30, 1973

Part I - Refuge Highlight Statement

The winter months of January and February were unseasonably warm and mild. The refuge was blessed with excellent winter weather, but was left extremely dry. The only relief from an emergency situation occurred on April 23. An unusually severe snowstorm accounted for 2.5 inches of moisture. Drought conditions returned soon after and endured throughout the fiscal year. Moisture totalled 6.1 inches for the last half of Fiscal Year 73 compared to 8.5 inches normal precipitation.

The drying of Water Management Unit IV caused heavy growth of Russian Thistle (*Salsola kali*) and fireweed (*Kochia scoparia*) in the unit. These tumbleweeds accumulated heavily in refuge fences and shelterbelts. Heavy winds compounded the problem and several miles of fenceline were damaged. Burning the tumbleweed accumulations was accomplished with moderate success.

During burning operations in late February, fire jumped a roadway and burned ten acres of the established 392 acre Natural Area.

Spring waterfowl migrations were, for the most part, normal. The first Pintail and Goldeneye arrivals were noted on March 3. Peak migration was experienced about March 21. A total of 32,000 ducks, including about 28,000 Pintail, were counted. Populations stabilized to summer breeding levels by May 15.

The first minor spring outbreak of botulism on refuge record was experienced during late March. Botulism was confirmed by Bear River Research Station. A total of 100 birds were lost in Water Management Unit VI of which 90% were Pintail.

Four free flying Mute Swans were noted on the refuge for two weeks during the end of June. Origin was unknown.

One hundred acres of refuge farmlands were retired and planted to dense nesting cover during May.

Canada Goose production remained at highest levels of refuge history. Approximately 40 goslings were produced. Duck production was the lowest recorded in recent years.

Extensive filamentous algae blooms were noted during June on all water management units. The algae mats created a partial anaerobic condition and contributed to rising water temperatures.

Water management projects included the construction of a berm around Water Unit V to eliminate extensive feather edging and drying Water Management Unit VI in anticipation of botulism season. Pumping operations were initiated on June 1, 1973.

Grazing permittees were allowed to bring their cattle onto the refuge on June 25. Most cattle were located on the dried pond bottoms of water units IV and VI.

Monthly Safety meetings were held informally in the shop with round-table discussions.

Part II - Refuge Accomplishments

The following output production was accomplished as part of the refuge program funding at Benton Lake. A total of 58,421,532 RBU's were produced at a cost of \$91,096.

Only output elements with a deviation of $\pm 25\%$ will be discussed. Deviation in total RBU production from planned units was $-.2\%$.

6-13 Visitor Contact Station (Deviation $+999\%$)

Prior to FY 73 outputs for visitor contacts at the refuge office were not a definable output and therefore not reported. The accomplished units therefore represent the first reporting of this activity. The deviation occurs as no units were planned.

6-14 Exhibits and Demonstrations (Deviation -49%)

The refuge currently has no qualifying exhibits and former use was terminated during FY 73.

6-15 Other Programs (Deviation -46%)

Requests for interpretive programs presented by the refuge staff decreased in FY 73.

6-20 Environmental Education - Students (Deviation -29%)

Although the same programs were conducted for students as in previous years, area student populations are decreasing.

6-21 Environmental Education - Teachers (Deviation $+781\%$)

Use by college students and area teachers increased dramatically during FY 73. Increase was unexpected.

6-22 Professional Services (Deviation -91%)

Requests for professional services decreased from previous years.

6-30 Hunting Migratory Birds (Deviation $+73\%$)

The opening date of hunting season was earlier in October than normal. This allowed four weeks of hunting prior to freeze up of water units as compared to the normal two weeks.

6-34 Wildlife Observation (Deviation $+121\%$)

The total activity hours spent observing wildlife increased with increased publicity.

6-35 Wildlife Appreciation

(Deviation +332%)

The output element is new, having become definable in FY 73. Outputs were underestimated.

6-36 Photography

(Deviation +108%)

One additional photographer spent unanticipated activity hours on the refuge.

6-37 Field Trials

(Deviation -100%)

No requests for field trials were received in FY 73 which was unusual.

6-38 Public Affairs

(Deviation -75%)

Less media information was published than anticipated.

6-50 Studies and Publications

(Deviation -50%)

SCS personnel did not conduct a study on the natural grassland area as usual, accounting for one less study.

6-56 Banding

(Deviation +999%)

The refuge no longer has a banding quota and the one program was an unexpected cooperative venture.

6-60 Natural Environments Preserved (Deviation -100% - error)

The P & A printout was in error. The output was accomplished and accounted for 247,660 RBU's.

6-70 Threatened Species

(Deviation -34%)

Decreased use by White-faced Ibis was noted.

6-73 Waterfowl Maintenance

(Deviation +50%)

Large fall and spring migrations with birds spending more time on the refuge accounted for the increase in use days.

6-80 Waterfowl Production

(Deviation -40%)

A dry years and decrease in water area resulted in a dramatic decrease in production.

6-90 Depredations Prevented

(Deviation +999% - error)

The P & A report was in error. Reported outputs were 8000 units instead of 800,000.

6-93 Grazing

(Deviation +999% - error)

The P & A report was in error. Reported outputs were \$1926.85 instead of \$192,685.

Appendix I

PLANNING AND ACCOMPLISHMENT REPORT

Part I Financial

PART I - FINANCIAL

BENTON LAKE
06-3515-10

*****PLANNED***** *****ACCOMPLISHED*****

*****DEVIATION (+/-)*****

WE CODE	WORK ELEMENT	WE UNITS	UNITS	FUNDS	PHM	UNITS	FUNDS	PHM	UNITS	FUNDS	PHM	DEVIATION (+/-) %
------------	--------------	----------	-------	-------	-----	-------	-------	-----	-------	-------	-----	-------------------

OPERATION AND MAINTENANCE

OPERATIONS

2-02	OPERATION-SURVEYS	NO. SURVEY	15	4,000	4.2	3	3,316	2.4	-80%	-17%	-43%	
2-03	OPERATION-FARMING	A. FARMED	220	2,700	3.0		371	.4	-100%	-86%	-87%	
2-04	OPERATION-GRASSLD PRAC	A. TREATED	250	1,500	1.3		930	.3	-100%	-39%		
2-05	OPERATION-PEST PLY CON	A. TREATED	160	500	.5	60	776	.9	-63%	+55%		
2-07	OPERATION-WAT LEVEL MGT	A. MANAGED	3,822	15,000	5.2	3,822	14,662	1.7			-67%	
2-08	OPERATION-PRESERIB BURN	A. BURNED					377	.4		+99%	+99%	
2-09	OPERATION-TREE & SHRUB	A. PLANTED	210	500	.5				-100%	-100%	-100%	
2-11	OPERATION-ANIMAL CONT	NO. AN CON	2	300	.3				-100%	-100%	-100%	
2-12	OPERATION-DISEASE CONT	NO. PROGS	1	8,000	7.5	1		2.9	-100%	-53%	-53%	
2-14	OPERATION-BIRD MARKING	NO. MARKED			.2		3,267	.1	-100%	+23%	+10%	
2-18	OPERATION-FEEDING	LBS. FED	100,000	100			80	.2	-67%	-73%	-73%	
2-19	OPERATION-ENVIR R & M	NO. PROJECT	3	400	.4	1		.1	-67%	+15%	+15%	
2-20	OPERATION-LITTER CONT	NO. RESPON	1,000	800	.8	400	917	.7	-71%	+24%	+14%	
2-21	OPERATION-PUBLIC INQ	NO. PROGS	24	800	.7	7	1,026	.8		-60%	-60%	
2-22	OPERATION-PROTECTION	AS APP		2,500	2.2		999	1.1		-71%	-71%	
2-23	OPERATION-BUREAU ACT	NO. PROJECT	1	600	.5	1	125	.1	-100%	-71%	-71%	
2-25	OPERATION-SPECIAL SER	AS APP	5	800	3.6		232	.2				
2-26	OPERATION-OTH OPERATION			4,000			3,787	2.7				

SUPPORTING FACILITIES

2-40	SUP FAC-ALDG-QTRS	SQ. FT	5,290	1,500	.7	5,290	3,246	2.6		+115%	+27%	
2-41	SUP FAC-ALDG-GEN NON-RC	SQ. FT	6,725	1,500	.7	6,725	4,480	3.4		+199%	+199%	
2-45	SUP FAC-SEL-RECREATION	AS APP		800	.7		2,563	2.2		-24%	-24%	
2-46	SUP FAC-SAT-TRANS NON-R	AS APP		500	.5		378	.4		+15%	+15%	
2-47	SUP FAC-SEL-WATER	AS APP		3,000	2.3		3,445	3.2		+77%	+77%	
2-49	SUP FAC-SEL-OTHER	AS APP		700			1,238	1.3				

SUPPORTING SERVICES

2-60	SUP SER-PLANNING	NO. PLANS	6	7,400	7.3	4	6,070	5.6	-33%	-10%	-10%	
2-61	SUP SER-TRAINING	HRS TRAINING	120	1,500	1.5	24	577	.6	-80%	-60%	-60%	
2-62	SUP SER-ADMINISTRATION	AS APP		20,000	19.0	1	25,943	23.4	+59%	+30%	+20%	
2-63	SUP SER-ENGINEERING	AS APP					102	.1		+99%	+99%	

SUPPORTING EQUIPMENT

2-71	SUP EQUIP-AUTO EQUIP	MI OPERD	29,000	2,900	3.0	19,000	2,693	1.3	-34%	-34%	-34%	
2-72	SUP EQUIP-FARM EQUIP	HRS OPERD	300	1,500	1.7	250	1,963	1.2	-17%	+31%	+31%	
2-73	SUP EQUIP-HEAVY EQUIP	HRS OPERD	200	1,800	1.9	200	4,214	2.6		+134%	+134%	

PLANNING AND ACCOMPLISHMENT REPORT
FY-73
PART I - FINANCIAL

PAGE 745

BENTON LAKE
06-3515-10

WE CODE	WORK ELEMENT	WE UNITS	*****PLANNED*****			*****ACCOMPLISHED*****			*DEVIATION (+/-%)*	
			UNITS	FUNDS	PMH	UNITS	FUNDS	PMH	UNITS	FUNDS
2-74	SUP EQUIP-WATERCRAFT	HRS OPERTD	300	400	.5	200	1,971	.7	-33%	+393%
2-75	SUP EQUIP-OTH MOTOR EQ	HRS OPERTD					783	.1	+99%	+493%
TOTAL OPERATIONS & MAINTENANCE										
TOTAL				86,000	72.0		91,096	63.7		-10%
EXPENDITURES BY PLANNING ALLOWANCE										
3-01	ACTIVITY-0113	N/A		84,000						-100%
3-02	ACTIVITY-0115	N/A		2,000						-100%
3-15	ACTIVITY-1116	N/A					91,096			+793%
3-16	ACTIVITY-2720	N/A					91,096			+933%

Appendix 2

PLANNING AND ACCOMPLISHMENT REPORT

Part II Output Production

PLANNING AND ACCOMPLISHMENT REPORT

73

PART II - OUTPUT PRODUCTION

BENTON LAKE
06-3515-10

PAGE 14

WE

CODE

OUTPUT ELEMENT

OE UNITS

PLANNED
UNITS

ACCOMPLISHED
UNITS

ACCOMPLISHED
RBU'S

DEVIATION

WILDLIFE--WILDLANDS INTERPRETATION

6-11 TOUR ROUTES
6-13 VISITOR CONTACT STATION
6-14 EXHIBITS - DEMONSTRATIONS
6-15 OTHER PROGRAMS

ACT HOURS
ACT HOURS
ACT HOURS
ACT HOURS

19,770
2,500
520

16,090
100
1,285
280

1,206,750
7,500
96,375
14,000

-197
+3311
-4
-458

ENVIRONMENTAL EDUCATION

6-20 STUDENTS
6-21 TEACHERS
6-22 PROFESSIONAL SERVICES

ACT HOURS
ACT HOURS
ACT HOURS

6,100
75
650

4,340
661
56

651,000
165,250
14,000

+7-12
-312

WILDLIFE--WILDLANDS RECREATION

6-30 HUNTING MIGRATORY BIRDS
6-34 WILDLIFE OBSERVATION
6-35 WILDLIFE APPRECIATION
6-36 PHOTOGRAPHY
6-37 FIELD TRIALS
6-38 PUBLIC AFFAIRS

ACT HOURS
ACT HOURS
ACT HOURS
ACT HOURS
ACT HOURS
PROGRAMS

5,523
3,144
200
25
2,190
16

9,548
6,962
863
52
4

477,400
348,100
12,945
2,600
1,000

+7-12
+12-17
+13-18
+14-19
-1-10

NON WILDLIFE ORIENTED RECREATION

6-41 PICNICKING

ACT GROUPS

82

83

PROFESSIONAL SERVICES

6-50 STUDIES & PUBLICATIONS
6-55 ECOLOGICAL MONITORING
6-56 RANGING
6-57 OTHER COOPERATIVE PROGRAMS

EACH
PROGRAM
EACH
PROGRAM

2
2
14

1
2
1
12

100,000
200,000
50,000
1,200,000

ENVIRONMENTAL PRESERVATION

6-60 NATURAL ENVIRONMENT PRESERVED

ACRE

12,383

12,383

247,660

-1008

WILDLIFE

6-70 THREATENED SPECIES
6-71 SPECIAL RECOGNITION SPECIES
6-72 WILDLIFE DIVERSITY
6-73 WATERFOWL MAINTENANCE
6-74 WATERFOWL PRODUCTION
6-82 SPECIES DIVERSITY

USE DAYS
USE DAYS
NO. SPECIES
USE DAYS
FA. ANIMAL
FA. ANIMAL

2,400
6,560,000
174
6,118,000
22,800
4

1,580
7,929,306
175
9,182,880
13,640
3

58,970
3,987,102
35,000,000
9,182,880
5,272,000
6,000

-31
+218
+200
-4
-258

ECONOMIC BENEFITS

6-90

DEPREDEATIONS PREVENTED

DOLLARS

10,000

80,000

80,000

+977

PLANNING AND ACCOMPLISHMENT REPORT
 PART II - OUTPUT PRODUCTION

PENTON L.
 06-3515-1C

WE CODE	OUTPUT ELEMENT	OE UNITS	PLANNED UNITS	ACCOMPLISHED UNITS	ACCOMPLISHED RBU'S
6-93	GRAZING		2,900	102,485 19,200	
9-10	TOTAL ANNUAL BENEFITS		58,489,000		

58,173,872
 58,421,532